

Notice of Allowability

Application No.

10/040,063

Examiner

Shefali D. Patel

Applicant(s)

JUNG ET AL.

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to an After Final on 10/4/2006.
2. ☒ The allowed claim(s) is/are 1-8 and 10-19.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

JINGGE WU
PRIMARY EXAMINER

DETAILED ACTION

Response to Amendment

1. The amendment filed on October 4, 2006 (Remarks on pages 7-10) overcomes the rejection made in the previous office action under 35 U.S.C. 112 1st paragraph.

Allowable Subject Matter

2. Claims 1-8 and 10-19 are allowed and re-numbered from 1-18.

3. The following is an examiner's statement of reasons for allowance:

The instant invention defines a method of reading out an electronic image sensor that is subdivided into image points and wherefrom image points or groups of image points can be read out with a predetermined clock period, and organized into at least two quantities of image points and/or groups of image points whose elements can be read out at different scanning rates as disclosed in claim 1. The claimed invention distinguishes over the prior art by the manner in which the prolonged integration of an exposure in the (ROI) results in an improved local signal-to-noise ratio (SNR) and a higher image quality in the region outside of the region of interest ROI. The claimed combination allows for improving a method of reading out an electronic image sensor that is subdivided into image points.

This type of method is conventional in the art. However, the prior art of record fails to teach selecting a ROI of the sensor for which the desired temporal resolution of the image is higher than that for a region outside the ROI of the sensor; collecting image information from the region outside the ROI for reading at a later stage; and separately reading each of the image points to provide an image, wherein the quantities of image points and/or groups of image points in the selected region are read out at a higher scanning rate than the scanning rate for quantities of image points and/or groups of image points in the region outside the ROI, and wherein a prolonged integration of an exposure in the region outside the ROI results in an improved local SNR and a higher image quality in the region outside the ROI

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These elements in combination with all of the other elements of the claims are not taught or fairly suggested in the prior art of record. The dependent claims 2-7, 10-13 and 15-19 are allowed for the same reasons.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shefali D. Patel whose telephone number is 571-272-7396. The examiner can normally be reached on M-F 8:00am - 5:00pm (First Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


JINGGE WU
PRIMARY EXAMINER

Shefali D Patel
Examiner
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